

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0551-0031

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Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/035,884		
		Filing Date	11/01/2001		
		First Named Inventor	Eric Karplus		
		Art Unit	2853		
		Examiner Name			
Sheet	1	of	4	Attorney Docket Number	

U.S. PATENT DOCUMENTS					
Examiner Initials ¹	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
OG OG OG OG OG OG OG OG OG OG		US- 6,111,299	08-29-2000	Dabrowski	
		US- 5,757,057	05-26-1998	Dabrowski	
		US- 5,500,378	03-19-1998	Ishaque	
		US- 5,448,308	08-29-1995	Piccone	
		US- 5,146,296	09-08-1992	Huth	
		US- 5,021,854	06-04-1991	Huth	
		US- 4,874,939	10-17-1989	Nishimoto	
		US- 4,749,849	06-07-1988	Hoeberechts	
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FOREIGN PATENT DOCUMENTS							
Examiner Initials ¹	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ⁴	Number ² - Kind Code ⁵ (if known)				

Examiner Signature	<i>Phit Gabe</i>	Date Considered	05/06/04
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² Applicant's unique citation designation number (optional). ³ See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ⁴ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁵ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁷ Applicant is to place a check mark here if English language Translation is attached.

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PTO/SB/088 (10-01)

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/035,684
		Filing Date	11/01/2001
		First Named Inventor	Eric Karplus
		Group Art Unit	
		Examiner Name	
Sheet 2	of 4	Attorney Docket Number	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Case No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
OG		APD References: C. CARRIER, R. LECOMTE, "Recent Results in Scintillation Detection with Silicon Avalanche Photodiodes", IEEE Trans. Nucl. Sci. 37(2), 209 (1990).
OG		G.C. HUTH, "Recent results obtained with high field, internally amplifying semiconductor radiation detectors", IEEE Trans. Nucl. Sci. NS-13(1), 38 (1966).
OG		F. MARTIN, G. ENTINE, R. FARRELL, "Measurements of the operating characteristics of a large-area avalanche photodiode", Optical Engineering, 31(1), 48 (1992).
OG		M.R. SQUILLANTE et al, "Avalanche Diode Low Energy X-Ray and Nuclear Particle Detector", IEEE Trans. Nucl. Sci. 33(1), 336 (1986).
OG		G.E. STILLMAN, C.M. WOLFE, Chapter 5 in "Semiconductors and Semimetals" R.K. Willardson, A.C. Beer Ed., Vol. 12, 291 (1977).
OG		Beveled edge configuration: R. FARRELL, K. VANDERPUE, G. ENTINE, M.R. SQUILLANTE, "High Resolution, Low Energy Avalanche Photodiode X-Ray Detectors", IEEE Trans. Nucl. Sci. 38(2), 144 (1991).
OG		"Reach-through" configuration: J.A. HAUGER et. al., "A time-of-flight detector based on silicon avalanche diodes", Nucl. Instrum. Meth. A337, 362 (1994).

Examiner Signature	<i>Wick Gahle</i>	Date Considered	05/06/04
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PTO/SB/088 (10-01)

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/035,684
		Filing Date	11/01/2001
		First Named Inventor	Eric Karplus
		Group Art Unit	2878
		Examiner Name	
Sheet 3 of 4	Attorney Docket Number		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published
OG		Solid State Photomultiplier: J. KIM, Y. YAMAMOTO, H. HOGUE, "Noise free avalanche multiplication in Si solid state photomultipliers", Appl. Phys. Lett. 70(21), pp. 2852-2854 (1997).
OG		Methods of obtaining position sensitive information from solid state detectors: SB KAUFMAN, BD WILKINS, MJ FLUSS, EP STEINBERG, "The response of position-sensitive detectors to fission fragments and other heavy ions", Nucl. Inst. Meth., 82, 117 (1970)
OG		E. GRAMSCH, S. ZHANG, M. MADDEN, M. LINDBERG, M. SZAWLOWSKI, "High density avalanche photodiode array", Proc. SPIE Vol. 2022, Oct. 1993, p. 111-119.
OG		Lateral effect photodiodes: R.B. OWEN, M.L. AWCOCK, "One and Two Dimensional Position Sensing Semiconductor Detectors", IEEE Trans. Nucl. Sci. NS-15, 290 (1968).
OG		B. O. KELLY, "Lateral-Effect Photodiodes", Laser Focus, Mar. 1976, pp. 38-40.
OG		K. KURASAWA, "An Application of PSD to Measurement of Position", Journal of the Japan Society of Precision Engineering, Vol 51, No. 4, 1985, pp. 730-737.

Examiner Signature	<i>Ohl Galt</i>	Date Considered	05/06/04
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 806. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		Filing Date	11/01/2001
		First Named Inventor	Eric Karplus
		Group Art Unit	2878
		Examiner Name	
Sheet 4 of 4	Attorney Docket Number		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
OG		Position sensitive readouts: M. LAMPTON, C.W. CARLSON, "Low distortion resistive anodes for two-dimensional position-sensitive MCP systems", Rev. Sci. Instrum. 50(9), Sept. 1979, pp.1093-1097.
OG		J.S. LAPINGTON, J. MILNES, M. PAGE, M. INGLE, K. REES, "Novel Electronic Readout Systems For Photon Counting Imagers", Proc. of SPIE, Vol 4128, 2000, pp. 120-128.
OG		C. MARTIN, P. JELINSKY, M. LAMPTON, R.F. MALINA, H.O. ANGER, "Wedge-and-strip anodes for centroid finding position-sensitive photon and particle detectors", Rev. Sci. Instrum. 52(7), Jul. 1981, pp.1067-1074.

Examiner Signature	<i>Ohl Gabe</i>	Date Considered	05/06/04
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